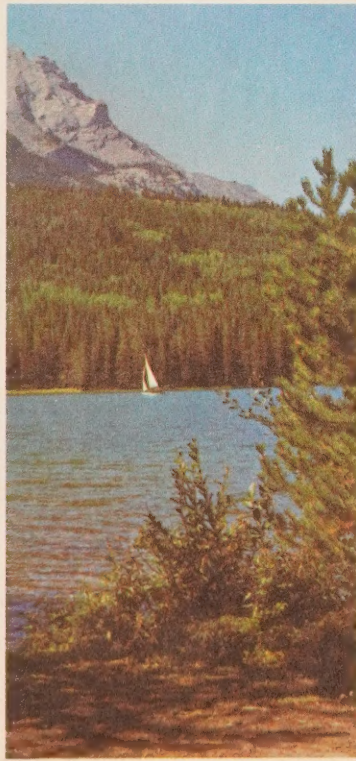


FACTS ON CANADA

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Can. External affairs dept





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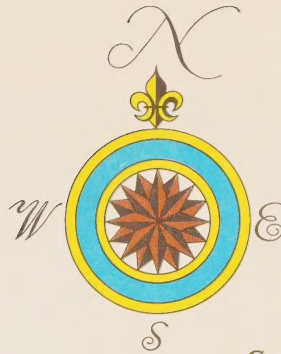
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Canada is 3.8 million square miles in area. It is the second largest country in the world, covering more than half the North American continent. There are five major geographical regions.

The Appalachian region in the east includes the Atlantic Provinces and part of southeastern Quebec, and consists of rounded hills and undulating plains.

The St. Lawrence Lowlands are an area of fertile, low-lying land bordering the Great Lakes and St. Lawrence River in southern Quebec and Ontario.

The Canadian Shield is an area of very ancient rock covering about 1.8 million square miles centred on Hudson Bay, extending west and north from the Atlantic Ocean to the Arctic Ocean. It is a region of rounded hills, numerous lakes and muskeg (swamp). The Shield contains a wealth of minerals.

The Interior Plains extend from the Gulf of Mexico to the Arctic Ocean. In Canada, the Shield forms their eastern limit and the Cordilleran region their western limit. In the southern part of the Prairie Provinces, the Plains are unforested and are devoted largely to a grain-growing economy. North of the Prairies, the Plains are forested. The rocks of the Interior Plains contain very important deposits of oil, gas and potash.

The Cordilleran region is a strip of mountainous terrain about 500 miles wide that includes most of British Columbia and the Yukon and part of western Alberta. The Canadian Rockies and the Mackenzie Mountains form its eastern ranges; in the west are the St. Elias and Coast Ranges. Between these mountainous areas are rugged plateaux.

WATER

Canada has about a quarter of the world's known fresh-water volume. Fresh water forms over 7.6 per cent of the total area of the country.

Four of the five Great Lakes lie partly in Canada.

Some of the largest lakes situated entirely within Canada are Great Bear (12,275 square miles), Great Slave (10,980 square miles), Winnipeg (9,465 square miles), and Athabasca (3,120 square miles).

The St. Lawrence River and the Great Lakes are one of the world's great waterways, and carry deep-sea shipping more than 2,280 miles from the Atlantic Ocean into the heart of the country.

The longest river in Canada is the Mackenzie (2,635 miles), which flows into the Arctic Ocean.

CLIMATE

Canada's climate is greatly influenced by its mountain ranges, plains and water surfaces.

The mountain ranges of the Cordilleran region prevent humid Pacific air from reaching the interior, and also prevent the westward flow of cold Arctic air from reaching the West Coast.

The central plains of the North American continent form a corridor for the flow of warm air north from the Gulf of Mexico and cold air from north to south and east. This air movement creates sudden and drastic weather changes in Canada's interior.

The large water surfaces in Central and Eastern Canada (Hudson Bay and the Great Lakes) produce considerable modification in the climate.

Canada's lowest official temperature reading was -81°F., recorded at Snag in the Yukon Territory in February 1947. The highest official temperature reading was 115°F., recorded at Gleichen, Alberta, in July 1903.

ATLANTIC PROVINCES

The combined area of the Atlantic Provinces – Newfoundland, Nova Scotia, New Brunswick and Prince Edward Island – is 208,148 square miles, slightly more than 5 per cent of the total area of Canada.



NEWFOUNDLAND

Area: 156,185 square miles

Population: 505,000

Capital: St. John's

The long arm of Labrador on the eastern boundary of Quebec belongs to the Canadian Shield; the island of Newfoundland is a continuation of the Appalachian Highlands. The highest point on the mainland is 5,320 feet and, on the island, 2,672 feet. The island's surface dips generally east and northeast, with rugged coasts in the south and east, fringed with islets. Peninsulas, bays, lakes and river basins on the island all lie in a northeast to southwest direction. Fresh water covers about 13,140 square miles of the province.

The temperature is moderate, with frequent high winds. Precipitation is heavy and nearly constant, with rain or snow on an average of 201 days a year at St. John's. The island has a yearly average of 45-55 inches.

Fish, particularly cod, is Newfoundland's best-known resource. Off the coast of Newfoundland lies the world's most extensive fishing-ground, the Continental Shelf.



There are an estimated 33,862 square miles of productive forest land, mainly on the island, which support a thriving pulp and paper industry.

Labrador contains most of the province's large deposits of iron ore, and many other minerals. It also possesses vast water-power resources. Newfoundland's soil suffers from acidity and much of it is rocky. Total occupied farm land is less than 0.2 per cent of the island's area.

NOVA SCOTIA

Area: 21,425 square miles

Population: 760,000

Capital: Halifax

The coast is bold and rugged, with excellent harbours. The Atlantic upland is a distinctive feature of the province, consisting of five detached fragments of uniform upland surface separated by lowlands and fertile valleys. There are many rivers and lakes.

The continental climate is somewhat moderated by oceanic influences on the prevailing west and north-west winds from the continent. Precipitation is about 50 inches annually.

Coal is the most important mineral resource. Nova Scotia has many other mineral deposits, including gypsum, barite and salt.

Forests cover more than three-quarters of the province, and there is an abundance of water-power, from which is generated almost as much electricity as from coal. From the Atlantic, the province obtains many varieties of fish, a major resource.

The most notable agricultural region is the Annapolis Valley, with its vast apple orchards. About 16 per cent of the total land area is occupied farm land.

NEW BRUNSWICK

Area: 28,354 square miles

Population: 627,000

Capital: Fredericton

New Brunswick has low, rounded hills and rolling uplands of moderate altitude. In the south and east the land lies close to sea level; in the north and west it rises in places to over 2,000 feet. Much of the soil is rocky, and arable land is scarce. There are many rivers. Saint John is an ice-free port.

The interior of the province has a continental climate, with intense heat and cold. On the coast, the climate is more temperate as a result of the maritime influences. Precipitation is ample and constant, amounting to about 41 inches a year.

Nearly half the value of New Brunswick's production (47.8 per cent) comes from manufacturing. The construction industry follows, with 21.9 per cent.

Although the soil is mainly unsuited to agriculture, a generous rainfall supports forests that cover 84 per cent of the area of the province. Forest industries account for 10.8 per cent of New Brunswick's production.

Other resources, in the order of their importance, are water-power, agriculture, mining and fishing.

PRINCE EDWARD ISLAND

Area: 2,184 square miles

Population: 109,000

Capital: Charlottetown

The crescent-shaped island is 145 miles long and from three to 35 miles wide. Its irregular coastline has large bays, long inlets, high cliffs and sandy beaches. The land is low and rolling; its highest elevation is only 450 feet above sea level.

The island is sheltered from the Atlantic by Nova Scotia and Newfoundland, and is therefore free from sudden extremes of temperature and from fog. Its water is warmer in summer than those of neighbouring provinces. The average precipitation is about 43 inches.

The climate and soil are well suited to mixed farming, and about 69 per cent of the province is occupied farm land. Potato-growing and dairying are the main agricultural activities.

The fishing industry suffers from the lack of harbour facilities, as there are only one or two readily accessible harbours on the north shore.

The island's fine weather, beaches, fishing and scenery are natural resources that attract many tourists and provide a substantial income.

CENTRAL PROVINCES



QUEBEC

Area: 594,860 square miles

Population: 5,744,000

Capital: Quebec City

There are three geological regions:

The St. Lawrence Lowlands, constituting a low-lying plain traversed by the St. Lawrence River, contains most of the populated area, industrial centres and fertile farm land.

The Appalachian region extends south of the St. Lawrence River between Quebec City and the interna-

Autumn hillside, Matapédia, Quebec



tional boundary, and includes the Gaspé Peninsula. It contains mountains and plateaux. Agriculture, chiefly in the form of dairy farming, is confined mainly to the valleys, the uplands being forested.

The Canadian Shield covers four-fifths of the province, forming an arc around Hudson Bay. Its area is 470,000 square miles, most of which is rocky and covered with coniferous forest. Only 5 per cent of the area is arable, most of this land being in the clay-belt east of Lake Abitibi.

There are no areas of great altitude, though the Laurentians, a division of the Canadian Shield north of the St. Lawrence Valley, rise to 3,000 feet in the west and almost 5,500 feet in Labrador. South of the St. Lawrence, the extension of the Appalachians reaches a height of 3,000-4,000 feet. With its many lakes and rivers, the province has 71,000 square miles of water. The St. Lawrence River is a major inland waterway, and the life of the province is concentrated along its banks.

The climate is varied. In the north and northwestern parts of the province it is cold and stable; in the south it is more temperate but subject to sudden changes. Precipitation is nearly constant throughout the year, ranging from 40 inches or more in the St. Lawrence Valley to 15 inches in the north.

Mining is Quebec's most important primary industry. Many metals have been mined for several decades; recently, huge quantities of iron and titanium were found in Ungava. The Gaspé produces asbestos and copper.

Hydro-electric power ranks second as a primary resource; there is more installed and potential water-power than in any other province.

Quebec's forests provide 38 per cent of Canada's pulp and 43 per cent of its paper production.

Quebec is second only to Ontario in industrial development, with many thriving industries.

Agriculture is centred in the fertile St. Lawrence Valley. Its importance has declined in recent years with increased industrial development.

ONTARIO

Area: 412,582 square miles

Population: 6,895,000

Capital: Toronto

Northern Ontario lies within the Canadian Shield and consists mainly of rocky forested country. There are patches of land suitable for cultivation, consisting of clay soil mixed with sand. A third of southern Ontario lies within the Shield; the rest of the region is underlain by limestone and shale, and the soil is of excellent arable quality. The highest elevation in the south is only 1,700 feet.

The climate is continental, with great variation in temperature. In the south, precipitation exceeds 30 inches a year; north of the Great Lakes it is about 20 inches.

Ontario has over 164,000 square miles of productive forest.

The province contains Canada's richest farm land and produces about a quarter of the country's net income from farming operations. Intensive mixed farming is carried on—dairying and livestock-raising, and the growing of tobacco and vegetables and fruits of all kinds.

Mining is of great significance. Most of Canada's nickel and platinum, and much of its gold, copper, cobalt, salt, sand and gravel are mined in Ontario.

The Great Lakes are a major source of freshwater fish.

Hydro-electric power is of prime importance; Niagara Falls are the chief source. This abundance of power has made possible the intensive industrial development of the province, particularly in the regions bordering the St. Lawrence River and the Great Lakes.

PRAIRIE PROVINCES

The Prairie Provinces (Manitoba, Saskatchewan and Alberta) cover 758,000 square miles, or about 20 per cent of Canada's area. The greater part of the three provinces consists of the Interior Plains, which are covered with grass in the south and wooded in the north. The Precambrian Shield, a rocky expanse dotted with rivers, forest and muskeg, covers much of northern Manitoba and Saskatchewan. Western Alberta lies in the foothills and ranges of the Rocky Mountains.



MANITOBA

Area: 251,000 square miles

Population: 958,000

Capital: Winnipeg

Most of the province is of limited elevation, the highest point being 2,727 feet. The freshwater area is 39,225 square miles. The northern three-fifths of the province lies within the Precambrian Shield.

Manitoba has continental extremes of heat and cold, ranging from -50°F. in winter to 90°F. or more in summer. Snowfall is less than in Eastern Canada. Precipitation averages 17.2 inches a year.

The primary resource is land; in the southwest the soil supports valuable crops of wheat. Other crops are oats, barley, rye, peas, rapeseed, sunflower seeds and mixed grains.

About 49 per cent of the province is forested, and nearly half this area produces marketable timber.

Rich mineral deposits have been found in the Shield.

SASKATCHEWAN

Area: 251,700 square miles

Population: 954,000

Capital: Regina

The northern third of the province lies within the Precambrian Shield. The southern part is a rolling plain. The freshwater area is 31,518 square miles.

As in Manitoba, the climate is continental; extremes of temperature as high as 100°F. and as low as -50°F. are not uncommon. The average annual precipitation is 11-20 inches, half of which occurs during the summer.

Land is the main resource. Over 40 per cent of the province is tillable, and over 18 million acres are planted to wheat.

There are valuable mineral deposits, the importance of which is increasing.

A prosperous potash industry has recently been established.

ALBERTA

Area: 255,285 square miles

Population: 1,464,000

Capital: Edmonton

The northern half of the province has many rivers, lakes and forests, with broad expanses of prairie country. The southern half contains fertile wheatland and rolling park-like terrain, as well as the mountainous region that forms part of the Rockies and their foothills.

The average yearly precipitation is from 10 to 20 inches. The warm Chinook wind from the southwest can cause the temperature to rise as much as 80° in a single day, turning snow to vapour.

The province has little water-power, owing to the gentle slope of the land, but energy is available from important deposits of petroleum, natural gas and coal.

Alberta produces about 63 per cent of Canada's oil and 85 per cent of its gas, and is the source of about 29 per cent of the country's native coal.

The industry next in importance is agriculture. About 29 per cent of the province consists of farm land that supports large crops of wheat and huge herds of livestock.

Forests cover more than 62 per cent of the province's surface.

BRITISH COLUMBIA AND THE TERRITORIES



BRITISH COLUMBIA

Area: 366,255 square miles

Population: 1,862,000

Capital: Victoria

Most of this province contains mountains and plateaux. The Rockies in the east (highest peak Mount Robson, 12,972 feet) and the Coast Mountains in the west (highest peak Mount Waddington, 13,260 feet) traverse the province from south to north. The highest peak in B.C. is Mount Fairweather (15,300 feet) in the St. Elias Mountains on the border of Alaska. In the south are a number of elongated and relatively narrow valleys, such as the Okanagan Valley, in which agriculture thrives.

The winds from the Pacific Ocean are warmed by the Japanese Current. Rainfall, varying regionally from 6 to 106 inches annually, is heavy on the coast in winter; but the interior, shielded by the Coast Range, is dry. Although extreme temperatures occur in the far north of the province, the mean temperature elsewhere ranges from 35°F. to 63°F.

Over 73 per cent of British Columbia is forested, and more than three-quarters of this area produces marketable timber. The province is Canada's largest producer of lumber and possesses a sizeable pulp and paper industry.

Though there is relatively little cultivable land, dairying and fruit-farming are important.

Fish, particularly the several varieties of Pacific salmon, is a valuable resource; the province ranks first in Canada in value of its catch.

In metal production British Columbia ranks fourth among the provinces. Its most important metals are zinc, lead, copper, silver and gold.

THE YUKON

Area: 207,076 square miles

Population: 15,000

Capital: Whitehorse

This territory consists of elevated plateaux and mountains lying within the Cordilleran region. Its highest peak, Mount Logan (19,850 feet), is also the highest in Canada.

Temperatures vary greatly, owing to the influence of the relatively warm Pacific Ocean and the cold Arctic Ocean. Though extremes of -81°F . and 95°F . have been recorded, the mean monthly temperature ranges in winter from 8°F . to -16°F . and in summer from 55°F . to 60°F . Precipitation is low, averaging 11-17 inches a year.

Minerals provide most of the territory's income. The most important are silver, lead, zinc, gold and copper.

Another significant natural resource is the substantial fur crop.

Water-power potential is great.

NORTHWEST TERRITORIES

Area: 1,304,903 square miles

Population: 26,000

Capital: Yellowknife

The Northwest Territories cover more than a third of Canada, and include the Arctic archipelago. Much of the region is low-lying but, in the northern Arctic islands, the land rises above 9,000 feet. There are over 51,000 square miles of fresh water in these territories, including the Mackenzie River and Great Bear and Great Slave Lakes. There are vast expanses of muskeg and, north of the tree-line, of barren tundra.

Summers are often warm below the tree-line, but farther north the climate is arctic. Winters are extremely cold, but snowfall is relatively light.

Minerals are the chief resource, and include zinc, lead, gold, silver, cadmium, copper and oil.

Furs, fish and forests also produce considerable income.

Moraine Lake in the Rocky Mountains



THE PEOPLE

Canada's estimated population as of June 1, 1966, was 19,919,000.

Over two-fifths is of British stock. French-speaking descendants of the original French colonists constitute about 30 per cent. The rest are of other origins.

Because the French retained their language, culture and traditions after the British conquest of Quebec, French Canada has a distinct cultural life of its own. Most French-speaking Canadians live in Quebec, but there are also many in other parts of the country, notably New Brunswick, Ontario and Manitoba.

The English-speaking population has increased mainly by immigration from the British Isles and the United States. More than 3.5 million are of Scottish and Irish descent; many others are descended from the thousands of American colonists who moved into Canada at the time of the American Revolution (1776-1783).

The early European immigrants to Canada, other than those of French and British origin, settled mainly in the Prairie Provinces; more recently they have settled in all the provinces. The third largest ethnic group in Canada are the Germans. Other large groups are the Ukrainians, Italians, Scandinavians, Netherlands and Poles.

The native peoples of Canada, the Indians and Eskimos, comprise only 1.2 per cent of the population. There are 217,864 Indians, 74 per cent of whom live on government reserves occupying nearly 6 million acres. Canada's 13,000 Eskimos live in the Northwest Territories, northern Quebec and Labrador.

Almost 70 per cent of Canada's population lives in urban areas concentrated within 100 miles of the United States border.

Farmers' market, Kitchener, Ontario



Eskimo child, Tuktoyaktuk, Northwest Territories



Highland and
Acadian dancers,
Cape Breton Island

HISTORY

Canada was first inhabited by Asian tribes believed by archaeologists to have migrated across the Bering Strait many thousands of years ago. The descendants of these people are today's Eskimos and Indians.

The name "Canada" is believed to have originated with its first inhabitants, since the Huron-Iroquois Indians used the word *kanata* to describe a settlement. The term is thought to have been picked up by European discoverers, who changed it to its present spelling.

The story of modern Canada began more than 465 years ago, when a Genoese navigator, John Cabot, claimed a large portion of the Atlantic seaboard in England's name, though no settlement occurred at that time.

Cabot was followed by Jacques Cartier, who erected a cross on the Gaspé Peninsula in 1534. The following year he sailed up the St. Lawrence River to the Indian settlements of Stadacona (on the site of today's Quebec) and Hochelaga (Montreal).

The true founder and settler of French Canada, however, was the French explorer Samuel de Champlain, who, impressed by the rich furs bartered by friendly

Changing the Guard at Fort Henry, Ontario

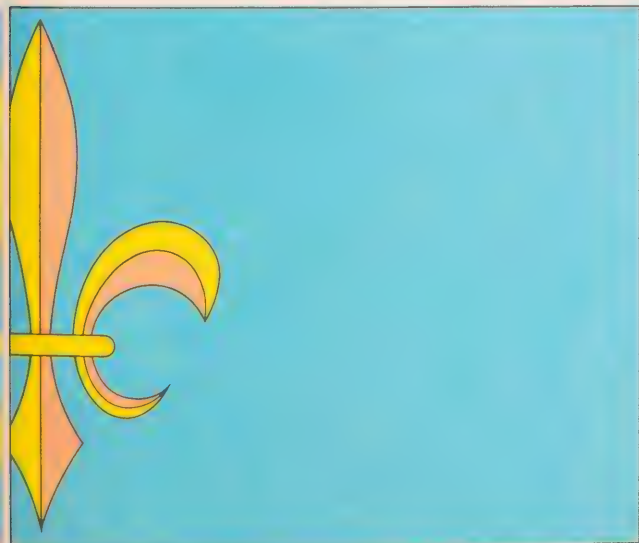


Indians he encountered, established between 1604 and 1634, tiny settlements of French pioneers along the Bay of Fundy and along the shores of the St. Lawrence at Quebec and Trois Rivières.

British attempts at settlement in Canada occurred as early as 1628 in Nova Scotia and Newfoundland.

Following the years of early settlement, both French and English pioneers lived off the land and engaged in the fiercely competitive fur trade. The rough land tracts they occupied were granted to them by their respective home governments; the furs they trapped or bartered for with the Indians were sent to France and England, where government-chartered companies reaped large profits.

Throughout the remainder of the seventeenth century and the eighteenth century, most of the territory eventually to be known as Canada was discovered, explored and mapped for future development. The Great Lakes and the Prairies, the Rocky Mountains and Pacific Coast, James Bay and the Canadian Arctic were all traversed or reached by the adventurous explorers of two centuries ago.



La Compagnie Franche de la Marine, Montreal



Seventeenth century settlement of Sainte Marie, reconstructed



Canada's political shape, after a century of conflict between the rival settlers, the political ambitions of the parent nations and the critical Seven Years War, began to emerge from the dust and smoke over the Plains of Abraham in 1759, where a battle was fought that resulted in the total conquest of the colonies by the British.

The Treaty of Paris, signed in 1763, placed New France under British sovereignty, though it permitted the French to retain their religion, language and civil law.

The American Revolutionary War of the 1770s, with the birth of an independent nation south of the Great Lakes and the St. Lawrence River, was an event as important for future Canadians as for the new citizens of the United States of America.

For, despite the overtures of the leaders of the Revolution and a march on Montreal by American forces, both French and English colonists in the north chose British sovereignty instead of the political independence conceived by their southern neighbours. British North America, partly French, partly English, was born.

For the ensuing 50 years, the colonies comprising British North America — Upper and Lower Canada (Ontario and Quebec), New Brunswick, Prince Edward Island and Nova Scotia — developed materially, and their populations increased. First came the Loyalists from the newly-created United States in the early 1780s to settle in Ontario and the maritime colonies; next came thousands of immigrants from Britain and Northwest Europe to accept offers of free land and supplies.

Agriculture and forestry eventually surpassed the fur trade in importance and were developed to the stage where the settlers could import manufactured goods in exchange for flour and lumber. Roads and canals were built; cities, towns and villages developed; religious and educational institutions flourished. The foundations for political evolution from colonialism were established.

Several important developments hastened the union of the colonies into a young nation in 1867. Among these were:

Upper Canada Village, Ontario





- The political uprisings of 1837 in both Upper and Lower Canada, by means of which a maturing citizenry, which had developed a rough land and fought for it, made known its needs and achieved the right to responsible government and a greater say in the political management of the new country;
- the end of the American Civil War, which left in existence large U.S. forces that it was feared might be directed against British North America in reprisal for British aid to the Confederacy;
- the expansion of the American West and the slower settlement of the Canadian territories west of the Great Lakes, prompting the development of rail communications and the feeling among Eastern political leaders that a federation of the whole country must be achieved if the West was to be saved from encroachment and the economic potential of the new country developed.

The British North America Act of 1867 created a new Canada, embracing four provinces — Ontario, Quebec, Nova Scotia and New Brunswick. It provided for a federal union and for the parliamentary system of government and an elected House of Commons, including the chief executive officer, the Prime Minister, and his Cabinet. Six other provinces eventually entered Confederation, the latest being Newfoundland in 1949.

The advent of the twentieth century brought with it millions of new settlers, an influx of foreign investment capital, financial and industrial development and the emergence of a steadily growing manufacturing industry.

The West became known as the “bread-basket of the world”, and agriculture became specialized. The discovery of gold, nickel, silver and a score of other ores revealed Canada as one of the world’s great storehouses of natural resources.

From 1914 to 1918, Canada’s contributions in men and material to the Allied victory earned important international recognition both economically and politically.

Economically, the country’s iron-and-steel industry, its shipbuilding industry, its new aircraft industry, its vast networks of communications (railways, highways, waterways, telegraph, telephone, wireless, etc.), all came into full play, and the young country took its first step towards modern industrialization.

Politically, as a country whose military forces fought with such gallantry throughout the war, Canada was invited to take a separate place at Versailles and was one of the original members of the League of Nations. Following the Imperial Conference at London in 1926, attended by Britain’s senior Dominions, and the enactment of the Statute of Westminster in 1931, Canada became a completely autonomous nation so far as its domestic and international policies were concerned.

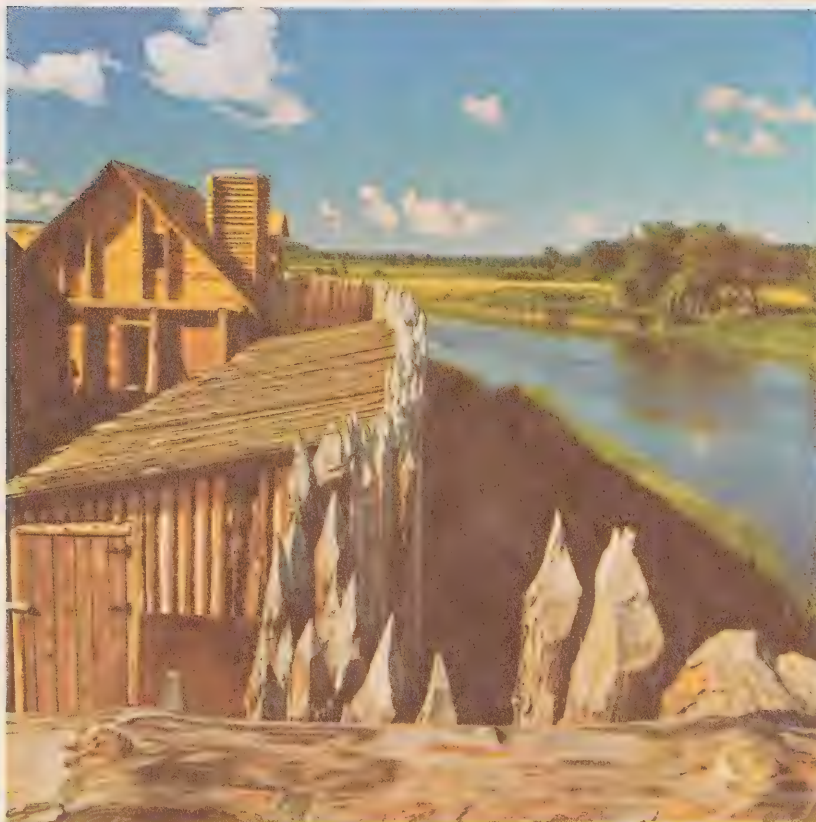
Following the severe economic hardships of the Thirties and the outbreak of the Second World War, which Canada entered on its own initiative, the nation again proved, through its manpower, its resources and abilities, to be both a tough fighting ally and a strong arsenal in the defence of freedom from political tyranny.

At the close of the war, Canada ranked third in naval strength and fourth in air-power among the Allies, and had contributed \$2,250 million in mutual aid to its comrades-in-arms.

Canada’s history for the 20 years following the end of the Second World War is the story of valuable aid to less fortunate countries, of further sacrifice in the Korean conflict and of numerous contributions to peace-keeping operations throughout the world.

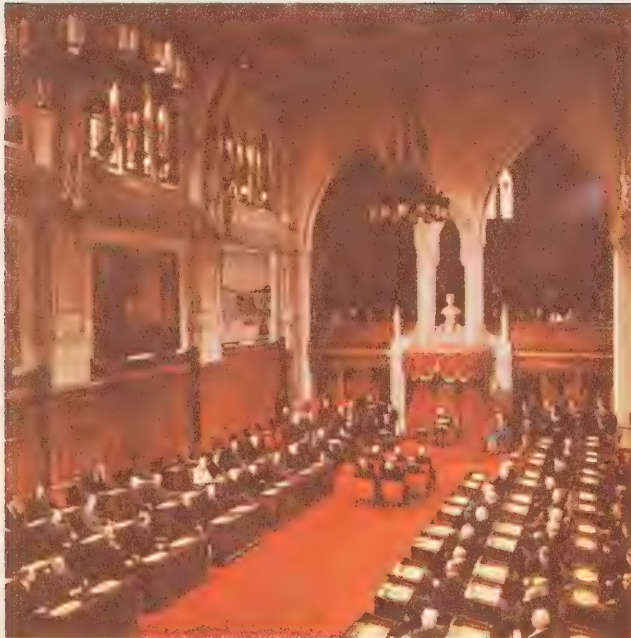
At home, it is the story of remarkable growth in primary and secondary industry, of rich new finds of oil, natural gas and many new minerals, of advances in science, culture and education, and in the ever-challenging task of achieving national unity without submerging the cultures of the peoples who helped build the nation.

The sharpened logs of its palisade protected Sainte Marie from Iroquois attack



GOVERNMENT

Opening of Parliament, Senate Chamber



FEDERAL

Canada has a parliamentary system of government, established with the adoption of the British North America Act of 1867, which states “there shall be one Parliament for Canada, consisting of the Queen, an Upper House styled the Senate, and the House of Commons”.

Queen Elizabeth II, as Queen of Canada, is Head of the Canadian State. (With the emergence of the Commonwealth of Nations in 1931, Canada, like several other original senior partners, such as Australia and New Zealand, chose to retain the same parliamentary structure it adopted in 1867.) The Queen’s representative in Canada is the Governor General, who is appointed on the recommendation of the Prime Minister, generally for a five-year period.

The House of Commons and the Senate constitute the legislative arm of the Canadian Government. The judiciary, which consists of the Supreme Court of Canada, the Exchequer Court, and several minor courts appointed by the Governor General, is independent of both Houses of Parliament.

The 265-member House of Commons, which includes the Prime Minister, his Cabinet colleagues and members of his party, and members of opposing parties, is an elected body. Federal elections are generally held every four or five years, but may be called at any time.

Five political parties are at present represented in the House — the Liberal Party, the Progressive Conservative Party, the New Democratic Party, Le Ralliement des Cr ditistes and the Social Credit Party.

By tradition, the leader of the party winning most seats in the House is asked by the Governor General to form the Government and thus becomes Prime Minister. He selects his Cabinet, which is the executive arm of the Government, from elected members of his party.

The Cabinet Ministers head the various government departments, which are staffed by civil servants administering the affairs of the nation. National policy is formulated by the Cabinet, but its decisions must have the support of the majority of elected members of the

House before becoming law.

The head of the party receiving the second largest number of votes in a federal election officially becomes Leader of the Opposition in the House. It is the responsibility of the Opposition party, and all other Members of the House of Commons, to examine all actions of the Government and criticize those with which they disagree.

Approval or disapproval of proposals, generally in the form of bills introduced by the Government and sometimes by private Members, is determined in the House by vote. Should the number of Members voting against an important Government proposal outnumber Government supporters, the Prime Minister and his Cabinet (i.e. the Government) are obliged to resign.

The Senate, or Upper House, consists of 102 members appointed on a regional basis by the Governor General on the recommendation of the Prime Minister. The Senate may initiate minor legislation that does not involve expenditure of public funds. The Senate is required to examine, pass or reject all legislation sent up from the House of Commons. Senators retire at the age of 75.

All Government bills are read three times in both the House of Commons and the Senate before becoming legislation or law. If a bill passes the House of Commons, it may be altered or rejected by the Senate. However, important measures cannot be held up indefinitely by the Upper House. All bills are given Royal Assent by the Governor General.

The Canadian Constitution, establishing the Government of Canada and the framework within which the federal and provincial governments share their respective responsibilities, is not incorporated in a single written document. It is rather a combination of enactments, beginning with the British North America Act of 1867, of statutes and orders in council and, more significantly, the adherence to parliamentary customs and practices inherited from the British system, upon which Canada's parliamentary government was modelled.

The major responsibilities of the Federal Government at Ottawa are the control of the nation's defences and foreign policy, trade and commerce, currency and banking and criminal law.

PROVINCIAL

There are ten provincial governments in Canada, each headed by a lieutenant-governor and consisting of an elected legislative assembly. The Province of Quebec alone has, in addition, an appointed Legislative Council.

Provincial governments are responsible for important matters such as education, working conditions, property laws and health. Within each province, elected municipal governments deal with local affairs. Each province has its own series of courts, ranging from magistrates' courts to the provincial superior court.

Lieutenant-governors represent the Crown, and are generally appointed for five-year terms by the Governor General on the recommendation of the Prime Minister.

TERRITORIAL

Both the Yukon and the Northwest Territories are represented in the House of Commons, and both have a degree of local self-government.

The Yukon government comprises a Commissioner, appointed by the Federal Government, and a locally-elected Legislative Council of seven members. The government of the Northwest Territories is also headed by an appointed Commissioner and a twelve-man Council, seven of whom are elected and the remainder appointed by the Federal Government.

Both the Yukon and Northwest Territories are administered by the Northern Administration Branch of the Federal Department of Indian Affairs and Northern Development.

INTERNATIONAL RELATIONS



Member of Canadian UN contingent
in Cyprus

As a leading middle power, Canada is engaged in the continuing search for peace and international well-being, in the struggle for better social and economic conditions among less fortunate peoples through technical and financial assistance, and in the pursuit of wider and freer international commerce.

The bases of Canadian foreign policy are its membership in the Commonwealth, the United Nations and the North Atlantic Treaty Organization, and its relations with the United States.

Responsibility for the conduct of Canada's international relations rests primarily with the Secretary of State for External Affairs and his ministry, the Department of External Affairs.

Canada's first diplomatic mission, the Canadian Legation (now Embassy) at Washington, was opened in 1927. Today Canadian interests are represented abroad by 77 embassies, 21 high commissioners' offices, 12 consulates general, 5 consulates, and 11 permanent missions to international organizations. Canada is a member of some 90 international associations and organizations.

As the national capital, Ottawa plays host to 50 foreign embassies and 13 high commissioners' offices; 79 other countries are represented in Canada by consulates but have no diplomatic missions.

Canada is a senior partner and a major participant in Commonwealth affairs. The present-day Commonwealth has evolved from the small group of British Dominions which joined with Britain to form such an association in 1931 to an imposing family of 23 sovereign states, covering roughly a quarter of the earth's surface and representing more than 700 million people of many colours, creeds and languages.

Within this global family, Canada is involved in active consultation and co-operation in such projects as the Colombo Plan, the Canada-West Indies Aid Programme and the Special Commonwealth-Africa Aid Programme. Scholarships, student and teacher exchanges and military training are arranged under Commonwealth

auspices.

Today, a nation's defence policy is inseparable from its foreign policy. Thus, under the North Atlantic Treaty Organization (NATO), of which it was a founding member in 1949, Canada has major defence commitments through contributions of sea, land and air personnel, as well as military equipment.

Also within the framework of NATO, Canada and the United States are linked by the North American Air Defence Command (NORAD) for their mutual protection.

Apart from Canada's defence contributions to NATO, it shares (with 14 other members) in the continuing exchange of information, opinions and plans regarding political, economic, cultural and scientific developments affecting the group. Canada has contributed some \$2 billion in equipment and training to other NATO countries.

Through the Organization for Economic Co-operation and Development (OECD), Canada shares with other NATO partners in discussions of trade and economic policies.

As a charter member of the United Nations, Canada for over 20 years has played a prominent role in the affairs of the world organization.

Canada has participated in every peace-keeping operation undertaken by the United Nations since 1948 — in Kashmir, Palestine, Korea, the Congo, West Irian, Yemen and Cyprus, and is one of the members of the Eighteen-Nation Disarmament Committee.

Canada's long-standing friendly relations with the United States are unique. Both nations share a common heritage and similar standards of living, yet both grew to their present status in separate ways.

Mutual defence is of vital importance to both nations, and, since 1940, a Permanent Joint Board on Defence has existed to co-ordinate and develop continental defence.

Because the two countries occupy the greater part of the northern half of the Western Hemisphere, many problems have arisen over boundary waters, canals and related matters, and, since 1909, an International Joint Commission has functioned successfully to help resolve difficulties to the satisfaction of both nations.



Canadian signaller in the Congo

FOREIGN TRADE AND COMMERCE



Freighter leaves
Toronto Harbour

In total volume of trade, Canada normally ranks fifth, after the United States, West Germany, Britain and France. On a population basis, it usually ranks seventh in exports and ninth in imports.

Over one-half of Canada's imports are fully-manufactured goods. About 45 per cent of Canada's imports enter duty-free. Exports, on the other hand, are mainly raw materials, food products and semi-manufactured goods. These classifications account for more than four-fifths of total exports.

The total value of Canada's foreign trade has advanced each year since 1958. In 1961, for the first time since 1952, exports exceeded imports, a trend that continued through to 1964. Canadian trade with all countries in 1965 reached \$17.2 billion, and there was a trade deficit of \$110 million.

Principal Domestic Exports Calendar Year

Commodity ⁽¹⁾	Calendar Year		
	1963	1964	1965
	\$'000	\$'000	\$'000
Newsprint paper.....	759,990	834,646	869,586
Wheat.....	786,804	1,023,516	840,175
Wood pulp.....	405,292	460,854	493,501
Lumber, softwood.....	426,855	449,732	457,967
Nickel, ores and alloys.....	324,604	363,181	397,200
Aluminum, ores and alloys.....	315,731	326,616	372,494
Iron ores and concentrates.....	270,949	356,007	360,819
Motor vehicles and parts.....	87,645	177,386	354,043
Crude petroleum.....	233,867	262,023	279,956
Copper, ores and alloys.....	220,314	255,936	272,681
Iron and steel, including alloys.....	183,758	228,533	229,792
Aircraft and parts.....	108,293	248,794	207,037
Fish, fresh, frozen and canned.....	159,832	186,381	196,695
Farm machinery.....	114,564	140,672	161,931
Machinery, except farm.....	107,087	135,630	160,470
Asbestos, unmanufactured.....	139,447	155,706	158,657
Zinc, ores and alloys.....	61,081	117,121	141,437
Whisky.....	90,125	102,820	116,990
Fertilizers and fertilizer materials.....	74,756	86,750	111,831
Natural gas.....	75,630	97,609	104,280

⁽¹⁾ Commodities ranked by value of exports in 1965.

The main components of Canadian export trade, by stages of manufacture, are fabricated materials, followed by crude materials, food products, and finished or end products.

Principal Imports Calendar Year

Commodity ⁽¹⁾	Calendar Year		
	1963	1964	1965
	\$'000	\$'000	\$'000
Motor vehicles and parts.....	668,632	817,822	1,124,828
Machinery, except farm.....	688,916	880,397	1,017,770
Iron and steel, including alloys.....	212,702	302,071	397,639
Crude petroleum.....	334,761	320,637	312,259
Aircraft and parts.....	127,422	137,249	206,711
Tractors and parts.....	168,339	183,299	200,175
Fruit and fruit preparations.....	184,626	193,999	197,190
Scientific equipment.....	131,194	148,570	181,920
Communication equipment.....	148,394	159,542	180,029
Chemicals, inorganic and organic.....	134,273	151,149	178,180
Other coal and petroleum products.....	121,117	136,477	177,530
Farm machinery.....	131,455	147,217	154,202
Cotton, including fabric, thread and yarn.....	134,948	154,003	153,163
Printed matter.....	118,871	133,279	151,737
Electrical equipment.....	107,058	105,191	134,107
Coal.....	78,806	86,472	126,200
Plastic materials.....	85,407	105,655	122,527
Wearing apparel and accessories.....	88,164	104,792	118,263
Wood, lumber and plywood.....	76,593	91,859	99,838
Vegetable and vegetable preparations.....	73,998	80,308	90,795

⁽¹⁾ Commodities ranked by value of imports in 1965.

The pattern of imports tended to follow a somewhat similar pattern over the past few years. Transportation and communication equipment and machinery account for over one-third of the total imports. Motor vehicles and parts top the list of leading commodities.

The United States is Canada's principal trading partner, each country being the other's best customer. Britain is second, and together these two countries participate in approximately three-quarters of Canada's international trade. The next largest market for Canadian goods is Japan, followed by the U.S.S.R. and West Germany. Owing mainly to substantial wheat sales in 1965, the U.S.S.R. was the fourth largest market, and Communist China was ninth.

The order of the first five most important suppliers of Canadian imports is the United States, Britain, Venezuela (petroleum), Japan (clothing and electrical goods) and West Germany (cars).

The primary function of the federal Department of Trade and Commerce is to promote external trade through its head office in Ottawa, its six regional Canadian offices and a corps of trade commissioners stationed around the world.

The Trade Commissioner Service has more than 158 trade commissioners stationed in 67 posts in 47 countries. Knowing the economic conditions in these territories, they provide information on potential markets, foreign competition, import contracts, tariff provisions, shipping facilities and labelling regulations. They also assist in securing reliable agents for Canadian firms and provide a point of contact for visiting businessmen.

The Canadian Government Travel Bureau, an agency of the Department of Trade and Commerce, is responsible for encouraging tourist travel to Canada and coordinates tourist promotion outside Canada. It also undertakes extensive advertising campaigns, and handles approximately 1.5 million inquiries annually from potential visitors to Canada. Tourist offices are operated in 13 cities in the United States, as well as London, Paris, Frankfurt, Mexico City and Tokyo.

Loading grain, Quebec



PRIMARY INDUSTRIES

AGRICULTURE

Agriculture is Canada's most important primary industry although it employs less than 9 per cent of the country's labour force. Occupied land exceeds 173 million acres and the total number of farms is 481,000. Farming is highly commercialized, mechanized and specialized.

Types of farming include dairying, livestock and poultry raising, grain, fruit and vegetable growing, and the cultivation of specialties such as tobacco and sugar-beets.



Apple-picking, Nova Scotia

The farm commodity produced in greatest abundance owing to the combined influence of climatic conditions, plant breeding programmes and an efficient grading system, is wheat. In 1965, the production of this grain reached 678 million bushels. The general agency in Canada for the sale of all grains, including wheat, is the Canadian Wheat Board, a Crown corporation.

Livestock and dairy enterprises together yield 53 per cent of the farm cash receipts. Wheat accounts for 27 per cent. Ranching prevails in the West, and native grasslands sustain almost four million head of beef cattle.

The most important fruit grown in Canada is the apple. Commercial orchards are found primarily in Nova Scotia's Annapolis Valley, Ontario's Niagara Peninsula and the Okanagan Valley of British Columbia. The 1965 apple crop was estimated at 22.1 million bushels.

Next to apples, peaches are Canada's most important commercial fruit, with production fluctuating between 1.8 and three million bushels annually. Canning and processing industries have been developed in fruit-growing areas.

There are over 2,000 fur farms in Canada, producing mostly mink and chinchilla. Today the value of pelts taken from animals raised in captivity surpasses the value of wildlife pelts. Production of all furs in 1964 numbered 5.6 million pelts and was valued at close to \$37 million.

Experimental farms and agricultural colleges play important roles in the development of Canada's very diversified and specialized agricultural industry. Government departments of agriculture, agricultural colleges and science faculties in some universities provide many services to Canadian farms through research establishments, inspection and grading services, health protection for animals and the operation of production and marketing programmes.



FORESTRY

Canada's forests, covering 1.7 million square miles, 968,000 of which are productive, extend in an unbroken belt 600 to 1,300 miles wide from the Atlantic to the Pacific. British Columbia, Ontario and Quebec, in that order, contain the largest stands of marketable timber.

There are approximately 150 varieties of tree native to Canada, 20 per cent of which are softwoods, such as spruce, Douglas fir, hemlock, cedar, pine and balsam.

Canadian forestry consists of woods operations, wood industries (including lumber), pulp-and-paper industries and wood-using and paper-using industries. Forest-products output in 1963 amounted to 3.7 billion cubic feet of solid wood (i.e. logs, pulpwood, poles, fuelwood, etc.). The forests are the source of over 27 per cent of all Canadian exports.

Trucking logs, Vancouver Island



The manufacture of pulp and paper has been Canada's leading industry for many years and stands first among all industries in value of shipments, exports, total wages paid and total capital invested. Canada stands second to the United States as the world's largest pulp-producer.

The value of the industry's annual shipments totals more than \$1.8 billion, and pulp-and-paper exports exceed \$1.3 billion annually. The industry employs 65,000 workers. During 1964, there were in Canada 131 mills producing pulp or paper, 75 of them producing both commodities. The largest individual pulp-and-paper mill in the world is located in Canada.

The industry has newsprint shipments of 7.4 million tons, more than three times that of any other country, and provides about 40 per cent of the world's newsprint needs. Newsprint is the nation's leading export. In addition, Canadian mills have a highly-developed production of fine paper, wrapping paper, tissues, paper-board and other cellulose products.

Saw milling employs over 45,000 workers, and its annual value of shipments is \$690 million. Other wood industries employ 4,200 workers, and their annual shipments are valued at \$375 million. Some saw mills can cut up to half a million board feet in a single shift. Exports of lumber are valued at \$450 million annually.

Federal and provincial departments of forestry maintain regional laboratories, field stations and experimental areas on Crown lands to carry out research in forest management, forest-fire control, disease and pest control, chiefly in the interest of forest conservation.

There are a number of fine schools of forestry at universities across Canada, and technical forestry training is offered by six forest-ranger schools and one junior college.

FISHERIES

Commercial fishing, which dates back nearly 500 years, was Canada's first primary industry. Today, fishing is the nation's fifth ranking primary industry. Canada's annual catch amounts to approximately two billion pounds, with a market value of over \$260 million.

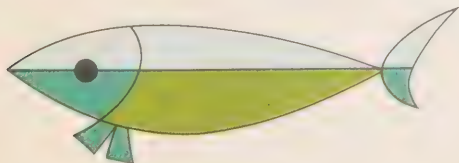
Eighty-two thousand commercial fishermen are employed in fishing operations. Exports in 1965 totalled approximately \$197 million.

On the world market, about 67 per cent of the total demand is for fresh, frozen or preserved fish; 13 per cent is for canned products and 20 per cent for shellfish.

On the Atlantic coast, cod, lobster, haddock, sardines and flounders, in that order, are the most important fish. On the Pacific coast, salmon, halibut and herring are the major species. The development of new fish-freezing plants in the Atlantic Provinces since 1963 has increased their proportion of the total national catch to about 60 per cent.

In May 1964, the Canadian Government established a 12-mile exclusive fishing-zone along Canada's coastline. The Federal Government has full legislative jurisdiction over coastal and inland fisheries for their protection, conservation and development.

Canada has entered into a number of international treaties, particularly with the United States, for the protection and preservation of marine fisheries. Among these are the International Northwest Atlantic Fisheries Convention and the International Pacific Salmon Fisheries Convention.



Codfish hauled from fishing-boat, Nova Scotia



Alberta oil-rig



MINING

The mining industry in Canada is four centuries old. Copper, iron and silver were first discovered in 1604, coal in 1672 and iron in 1667. The first iron smelter, La Compagnie des Forges, was established in 1737 in Quebec. The Geological Survey of Canada, which enjoys a worldwide reputation, was established in 1843.

The discovery of gold in the Fraser River in 1858 attracted widespread interest. As the California gold strike of 1849 waned, miners flocked north to Canada to discover gold in the Yukon River in 1869. In 1896, the famous Klondike discovery was made, and thousands of prospectors moved into the Yukon.

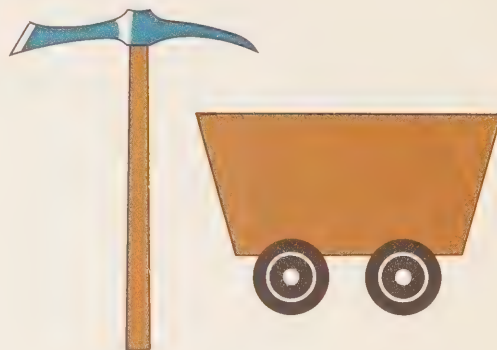
The mining industry in Canada ranks second only to agriculture among primary industries in the net value of its output, and leads all primary industries in the aggregate value of output. Raw and semi-processed mineral products amounted to 32 per cent of the nation's exports in 1965.

Mineral production—metallic, non-metallic, fuels and structural materials—in 1965 was valued at \$3.7 billion. Canada leads the world in the production of nickel, asbestos, platinum and zinc and is second in the production of uranium, cadmium, cobalt and gypsum. Canada supplies four-fifths of the world's nickel requirements and produces over 500 million pounds a year.

Canada also produces 40 per cent of the world's asbestos, 23 per cent of its elemental sulphur requirements and 10 per cent of its potash. It is the second largest producer of aluminum. The largest aluminum smelter in the world, located at Arvida, Quebec, has a capacity of 373,000 tons a year. One of the most modern plants in North America for the production of aluminum sheets is located at Kingston, Ontario. Its annual capacity is 35,000 tons.

Crude-oil production in 1965 was 294 million barrels. Reserves of crude oil in Canada from the beginning of 1966 were 6.7 billion barrels, or the equivalent of 23 years of production at the current rate. Natural-gas reserves will last 30 years at the present production rate.

Iron-ore deposits now under exploration will make Canada in the near future a major iron-exporting nation. From 1944 to 1965, production increased from 0.6 million tons to 39.8 million tons valued at \$1.9 million and \$419 million respectively.



ELECTRIC POWER

Canada occupies second place in the world's *per capita* production of electricity. The total electrical energy generated in Canada in 1965 amounted to 143 billion kwh. At the end of 1965, the total installed generating capacity exceeded 29 million kw.

Seventy-four per cent of Canada's present power needs are met by energy generated from water-power. Since this resource is renewable, it is one of the nation's permanent natural assets. Canadians enjoy some of the lowest electricity rates in the world. The rate for domestic service over the past five years has averaged 1.6 cents a kwh, compared to 2.3 cents a kwh in the United States.

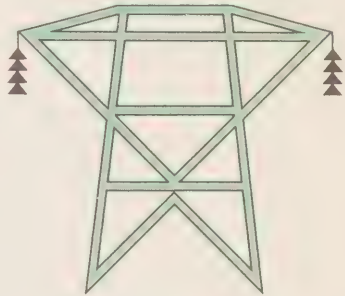
The use of nuclear fuels for producing electric power has been the subject of intensive research in Canada and, in 1962, the country's first commercial nuclear electric power became available at Rolphton, Ontario. Coal, oil and natural gas are also used to produce thermal-electrical energy. In this domain, Ontario produces over 40 per cent of the total.

In available power resources, Quebec is Canada's richest province and British Columbia is its second richest. Quebec is also first in the amount of water-power developed. Ontario is second and British Columbia third. It is interesting to note that Quebec's entire hydro capacity is installed on rivers in the St. Lawrence River basin.

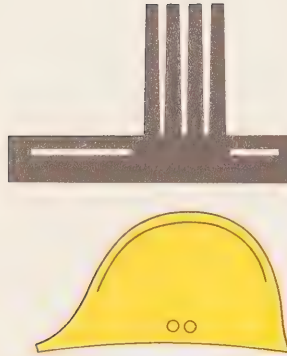
The Beauharnois plant on the St. Lawrence River, which has a generating capacity in excess of 1.5 million kw, is Canada's largest plant. An ambitious project on the Manicouagan and Outardes Rivers in Quebec involves the harnessing of the two streams by the construction of a series of six new hydro plants and the extension of two already in existence to provide a total of nearly 6 million kw. British Columbia is constructing a plant on the Peace River that will have a capacity of 2.3 million kw.

The Columbia River Treaty, under which Canada and the United States will jointly develop the waters of the Columbia River to provide large new supplies of low-cost hydro-electric power and important flood-

control benefits for both countries, was ratified in 1964. Canada will receive half the power benefits accruing in the United States from the regulation of 15.5 million acre-feet of water stored in Canada.



SECONDARY INDUSTRIES



At the time of Confederation, approximately 15 per cent of the workers in the population were employed in manufacturing and half in agriculture. Today less than nine per cent are employed in agriculture and almost a quarter in manufacturing. Early manufactures were textiles, iron work, furniture, farm implements, flour, food and shoes.

The very rapid rate of industrial growth during the last 25 years of the nineteenth century had a massive impact on Canadian manufacturing. But it was the enormous demand of the Second World War on industry as a whole that caused the Canadian economy to undergo a surge of growth that reached its peak in 1944. The value of shipments of the manufacturing industries in that year was over two and a half times that of 1939.

Since then, the discovery of large supplies of petroleum and natural gas and the construction of pipelines for their distribution, the discovery of large-scale deposits of iron ore and base metals, the growth of population, and the demand for consumer goods, have all contributed to a diversified expansion of manufacturing unequalled in any period.

Canada is one of the leading manufacturing nations of the world. Manufacturing employs one of every four Canadians in the labour force, approximately the same proportion as in the United States. There are more Canadians employed in manufacturing than in farming, fishing, forestry, mining and construction combined. In 1963, the selling value of factory shipments reached \$28.9 billion. Salaries and wages reached \$6.5 billion, and there were 1.4 million employees.

Ontario is recognized as one of the world's major industrial areas, and, in 1963, accounted for 51 per cent of the total Canadian value of shipments in the manufacturing industries. Quebec accounted for 29 per cent and British Columbia for 8 per cent.

Motor-vehicle manufacturing today ranks as Canada's second largest industry in gross value of shipments. Factory production began in 1904 and, by 1965, the country's assembly-lines were producing almost 711,000



Alberta gas-plant



cars and 145,000 commercial vehicles. The total number of vehicles in use at the end of the same year was almost 6.4 million. Exports of Canadian-made vehicles amounted to \$170 million and imports to \$269 million.

Canada ranks tenth among the steel-producing nations; its production, since the end of the Second World War, has increased almost fivefold. The 1965 production reached an all-time high of 9.9 million tons.

The primary textile, knitting and clothing industries in Canada employ over half a million people, one of the largest employers in the country. Over 85 per cent of the companies in these industries are controlled by Canadians and their shipments in 1963 were valued at almost \$2.3 billion.

The primary textile industry is a decentralized, small-town industry with most of its 1,000 plants located in Quebec and Ontario. There are two textile industries in the country. One makes or processes man-made and natural fibres and produces many consumer products. Its principal function is to supply the cutting or garment industry, which is the second of the textile industries. There are more than 2,200 clothing factories producing goods worth more than \$920 million a year. The value of shipments of men's clothing is slightly higher than the value of shipments of women's clothing. Production of leather footwear in 1965 was 47.5 million pairs.

The electrical products industries date from 1881. Today they rank seventh in the value of shipments, which were worth approximately \$1.5 billion in 1963 and employed over 100,000 people.

The construction industry employs about half a million people. Expenditures on new or repair construction work in 1965 were estimated at \$9.9 billion.

Machine-operator in
Hamilton, Ontario, foundry



Molten slag, Sudbury, Ontario



TRANSPORTATION

Transportation is essential to the survival of a country like Canada, exceeding 4,000 miles in breadth and almost 3,000 miles in depth from its southern border to the Arctic Ocean; and the successful development of its vast transportation systems chiefly accounts for Canada's current status as a prosperous industrial nation.

Most prominent among these systems are the railways. Of these, two transcontinental systems, the government-owned Canadian National and the Canadian Pacific Railway Company, provide over 90 per cent of all rail transportation. There are approximately 60,000 miles of track throughout the country, and the railways today carry about 42 per cent of the ton-miles of freight but less than 5 per cent of passenger traffic.

The modernization of Canada's railway systems in recent years is attested by the complete changeover from steam to diesel locomotion, electronically-operated freight yards, data-processing systems for operational, accounting and statistical purposes, the construction of new rail lines into the more remote mining areas in Canada's North, and the elimination of certain uneconomical lines and services.

The importance of road transportation in Canada is emphasized by the fact that there are about 480,000 miles of roads and streets, the vast majority of which are surfaced; there are close to 6,400,000 motor vehicles registered in Canada, and the average mileage driven by Canadians annually exceeds 9,000. The automobile accounts for approximately 85 per cent of all passenger miles travelled each year.

Passenger jet-liner in flight





Freight and passenger services on Canadian roads and highways have expanded considerably in recent years, owing to the rapid growth in urban population and the expansion of the trucking industry from rural and local services to transcontinental services, and north and south across the Canada-United States border.

More than 1.2 million trucks and road tractors operate on Canadian roads; and about 57 million passengers use the numerous interurban and rural bus services annually.

Canada has many new roads and expressways, but the most important nationally is the 4,860-mile Trans-Canada Highway, completed in 1962, which makes it possible to drive from St. John's in the east to Victoria in the west.

Water transportation, the earliest form of conveyance in Canada, still commands a most important position in a nation possessing three sea-coasts and thousands of navigable miles of rivers and lakes.

Canada possesses 22 large ports, each of which handles over two million tons of cargo a year. The St. Lawrence Seaway, a 2,280-mile water route from the Atlantic to the heart of the continent, has been operating since 1959, and approximately 5.6 million tons of iron ore, wheat and other commodities are transported every season through its series of 17 locks, with a total elevation from east to west above sea level of 602 feet.

The National Harbours Board administers eight of Canada's major ports. All Canadian waterways, including canals, lakes and rivers, are open on equal terms to ships of all countries, except for those taking part in the coastal trade.

Of growing importance among Canada's transportation systems are its modern airlines. Beginning in a small way in the 1920s with exploration flights to the northern bushlands and airmail flights on short runs, Canada's civil aviation industry today occupies an important position in the world of transportation.

Fast, powerful jet-liners of the two major lines—Air Canada, owned and operated as a Crown company, and Canadian Pacific Airlines, a subsidiary of the Canadian Pacific Railway Company—now carry passengers across the continent in from seven to eight hours. Some 7,016 registered civil aircraft operate in and out of approximately 1,522 airports, seaplane bases, "heliports" and military airfields. Canadian air-carriers transport some 6.6 million passengers and over 153,000 tons of freight yearly.

In addition to domestic lines and services, including many serving important northern routes, Canada's international airports serve as landing and departure bases for scores of foreign-operated lines. Montreal is the headquarters of the International Civil Aviation Organization and the International Air Transport Association—the world's two most important aviation bodies.

Newly added to the field of large-scale transportation in Canada are over 53,000 miles of oil and gas pipelines of varying diameter, snaking out from the western plains in all directions to feed crude oil to refineries as much as 2,000 miles from the source and carrying natural gas to industries and private homes across the continent.

The oil and gas pipelines were constructed mainly from 1950 on and carry their cargoes over the Rocky Mountains to the west coast, south into the United States and east to the industrial centres along the shores of the Great Lakes and the St. Lawrence River.

Roughly two million barrels of crude oil are moved each day by pipeline and as much as 2.6 million cubic feet of natural gas are carried in the same way every year to provide energy for gas utilities industries, which, in turn, distribute it to more than one million consumers, chiefly in Ontario and Alberta.

RESEARCH AND DEVELOPMENT



Solar furnace
uses sun's rays
to create heats
like those of
atomic blasts

The organization of research in Canada is unique because of the country's enormous area and small and unevenly distributed population. Furthermore, the fact that Canada borders three oceans and possesses vast northern regions makes it particularly fitted for many types of research.

Research in Canada is carried on at four levels: by the Federal Government, by provincial governments, by universities and by industry.

The federal departments that administer the development of natural resources have the longest history of scientific research. Some provincial governments have research councils that concentrate mainly on applied research directed toward the development of provincial resources and local industry.

In the federal sphere of research, many areas of science and technology, particularly those that aid the secondary industries, fall within the scope of the National Research Council, which was established in 1916. Beginning with three research divisions, in chemistry, physics and biology, the NRC has expanded to comprise 10 divisions and two regional laboratories in science and engineering. Of 2,760 NRC employees, 788 are professional scientists and engineers.

Under federal jurisdiction also are Atomic Energy of Canada Ltd., the Defence Research Board, and the Medical Research Council. The Defence Research Board conducts investigations into materials, armaments, special weapons, telecommunications, aeronautics and Arctic problems. This Board, the NRC and the Medical Research Council make extensive financial grants to universities and university students.

Atomic Energy of Canada Ltd., a Crown company, is concerned with nuclear research and development, the design and construction of reactors for nuclear power, and the production of radioactive isotopes and associated equipment, such as cobalt-60 beam-therapy units for the treatment of cancer.





The company's major plant and laboratories are located at Chalk River, Ontario, where research is conducted by 200 professional scientists and engineers and 300 technicians. Research at Chalk River is principally concerned with atomic-nuclei structure and the generation of electricity by nuclear power.

Universities have, of recent years, greatly increased their research programmes and facilities. Research conducted by universities, and reported in professional journals is truly encyclopedic and reflects both a high degree of specialization and an extraordinary variety of interests. Financial support for university research comes from governments, industry and private foundations.

Canadian firms are today well aware of the value of research, and many companies, especially the larger ones, have substantial research establishments of their own.

Specialized research projects are varied. The Continental Shelf Project in the Arctic, which is at present the subject of intensive study, is expected to yield detailed and accurate information on the physical and chemical composition of the waters of the Arctic Ocean, the nature of the Shelf, and the behaviour of glaciers, sea-ice and climate in the recent geological past.

Canadian scientists also pay particular attention to the earth's magnetism, since Canada plays, as it were, the role of host to the Magnetic Pole. The Northern Lights (*aurora borealis*) are also related to the earth's magnetic field, and scientists are studying the electrical nature of the atmosphere, where the phenomenon is produced, by measuring the upper atmosphere with new rocket techniques.

Since the Canadian coast-line is one of the longest in the world, scientists are vigorously working on oceanographic research programmes. Oceanographic measurements are made on cruises by specially equipped ships and include the determination of ocean currents, water temperature and salinity and plankton content.

Geological research is important because the Canadian Shield is one of the most intricate and richest rock formations on earth. The geological sciences have a long tradition in Canada and include not only mineral exploration but the dating of rocks by radioactive methods, etc. The origin of a number of very ancient so-called craters in Northern Canada is the subject of much study and debate.

There are also research programmes in meteorology, which involve the use of radar to study storm conditions and the use of rockets to forecast weather.

Aviation research to aid in opening up the North plays a leading role in developing aircraft with short take-off and landing characteristics. The Canadian-designed *Otter*, *Beaver* and *Caribou* aircraft are internationally known as being particularly well-suited to wilderness flying. Research engineers are now working on designing a reliable and economical vertical take-off and landing aircraft, thus foreshadowing the possibility of doing away with runways completely.

In addition to their participation in the above-mentioned research projects, the beneficial results of which are shared by many other countries, Canada's scientists play an important part in international research projects.

Canadian scientists took a significant part in the International Geophysical Year (IGY) and are also playing a similar role in the programme of the International Year of the Quiet Sun (IQSY), particularly in cosmic-ray studies in the World Magnetic Survey.

Canada collaborates very closely in atomic research with the United States, Britain and other countries. Canada and the U.S. also exchange technical data freely.

Most medical research is done by universities and affiliated hospitals and institutions. Outstanding contributions have been made to neuro-chemistry and bio-chemistry by the Montreal Neurological Institute at McGill University and by the Banting and Best Depart-

ment of Research at the University of Toronto, both of which have international reputations. The Connaught Medical Laboratories in Toronto and the Institute of Micro-biology in Montreal are well known for their studies of viruses. The Allan Memorial Institute in Montreal has established itself as a leader in research on mental illness.

EDUCATION AND THE ARTS

Education is compulsory in Canada to all children from the age of 6 to 14 or 16, depending on the provinces where they live, and is free until the completion of secondary-school studies. Most schools are co-educational, and vary in form from the one-room school-house to ultra-modern suburban structures.

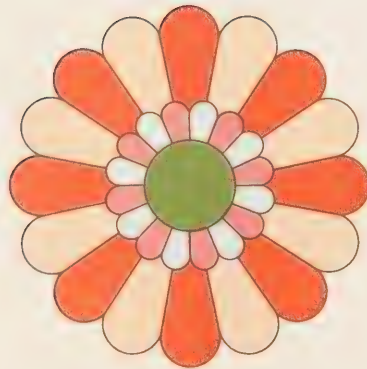
Under the terms of the British North America Act, responsibility for education is vested in the provinces. There is no federal department of education, but the ten provincial departments exercise exclusive jurisdiction over education in their respective provinces.

In some provinces separate schools are operated by Catholic or Protestant minorities. Relatively few students attend private schools; in the English-speaking provinces, the proportion is 3 per cent, and in Quebec 8 per cent.

In spite of the multiplicity of educational systems and authorities, co-operation has produced more uniformity than might be expected.

Canada has about 370 universities and colleges, with a full-time enrolment of 200,000 students. Some of these institutions receive provincial and federal grants; others are supported by religious denominations and private endowment.

Because university fees have risen in recent years, students often take part-time or summer employment. In 1964, the Federal Government established a \$50-million programme of student loans. A student may borrow up to \$5,000 during his undergraduate years or graduate years at a Canadian university or other institution of higher learning.



Scene from *Richard II* at Stratford, Ontario

Some of the larger universities have more than 10,000 students and, with the rapidly increasing enrolment, all face complex expansion and financial problems.

The Canada Council, a federal body created in 1957 to encourage the development of the arts, humanities and social sciences, has made considerable sums available to artists and artistic undertakings. During 1966-67, the Council is expected to dispense \$5,500,000 in various forms of assistance to the arts. Several of the provinces and many municipalities also provide financial aid to artistic enterprises.

The remarkable flowering of the arts in Canada in recent years has been due, among other influences, to the widespread interest in Canada's centennial, in preparation for which concert halls, theatres, cultural centres and conservatories have been built across the country.

Theatre is flourishing in Canada. In addition to the many amateur groups, of which the six best compete each year in the Dominion Drama Festival, an increasing number of professional companies are performing in their home centres and on tour in Canada and abroad. These include the Neptune Theatre (Halifax), l'Estoc (Quebec), le Rideau Vert and le Théâtre du Nouveau Monde (Montreal), Workshop Productions (Toronto), the Manitoba Theatre Centre (Winnipeg), the Citadel (Edmonton) and the Vancouver Playhouse. The most important of the Canadian drama schools is the National Theatre School, which provides courses in both English and French and is held at Stratford, Ontario, during the summer and in Montreal during the rest of the year.

Halifax, Montreal, Toronto, Winnipeg and Vancouver have professional symphony orchestras. The Montreal and Toronto orchestras have represented Canada abroad with great success. Two chamber groups, the McGill Chamber Orchestra of Montreal and the Hart House Orchestra of Toronto, are well known in international musical circles. Most other Canadian cities have amateur symphony orchestras or chamber groups.



Student cellists, Banff School of Fine Arts



Interest in orchestral music is growing among young Canadians, and the National Youth Orchestra is highly regarded abroad. The summer camp of Les Jeunesses Musicales at Mount Orford, Quebec, and the Banff School of Fine Arts are also developing young Canadian musicians.

Canada possesses three professional ballet companies of international repute—the Royal Winnipeg Ballet, the National Ballet of Canada (Toronto), and les Grands Ballets Canadiens. These companies are making an important contribution to the musical and artistic development of the nation.

Canada's leading opera companies are le Théâtre Lyrique de Nouvelle-France (Quebec), the Vancouver Opera Association and the Canadian Opera Company (Toronto). None of these companies, however, can operate all year round. Operas are produced occasionally by other organizations, notably the Montreal Symphony Orchestra.

A number of music and drama festivals take place each year, the most famous of which is the Stratford Shakespearean Festival at Stratford, Ontario. Other noteworthy festivals are held annually at Montreal, Vancouver and Niagara-on-the-Lake, Ontario.

Canada's most original contribution to the arts has probably been in painting, which, from the pioneer work of the Group of Seven to that of numerous contemporary artists, has manifested a vigour hardly surpassed by the artistic output of any other nation of comparable size. Of first importance in providing a public and a market for Canadian painters and sculptors have been the purchasing and exhibiting policies of the National Gallery in Ottawa. The Federal Government also buys Canadian works of art for many of its buildings.

Since the Second World War, the literature of Canada has acquired international stature. Many literary prizes are won each year by Canadians. Besides the many books published in Canada, the works of

numerous Canadian authors are now being published abroad.

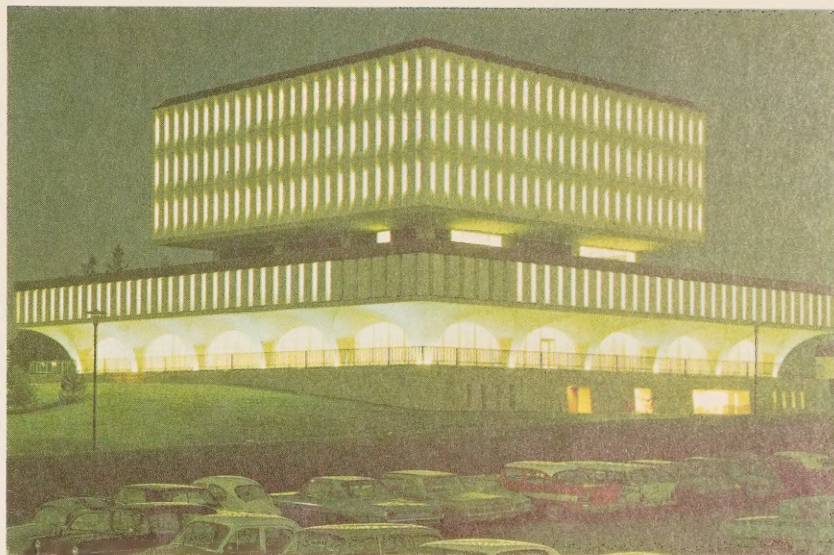
The radio and television networks of the Canadian Broadcasting Corporation have performed an invaluable service not only in bringing the various Canadian arts before a national audience but also in producing original films and dramas designed specifically for broadcasting.

Montreal is the fourth largest producer of television programmes in the world, and is first in the production of French-language programmes.

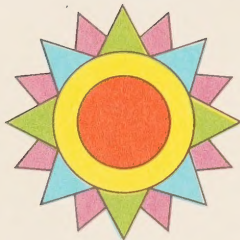
As does CBC, the private radio and television stations throughout Canada carry classical music and drama for that part of their audience that has no taste for a steady diet of light entertainment.

The contribution of the National Film Board to the popularizing of the arts has been only slightly smaller than that of the CBC, and its original productions have probably been more extensive.

Library, Waterloo University, Ontario



RECREATION



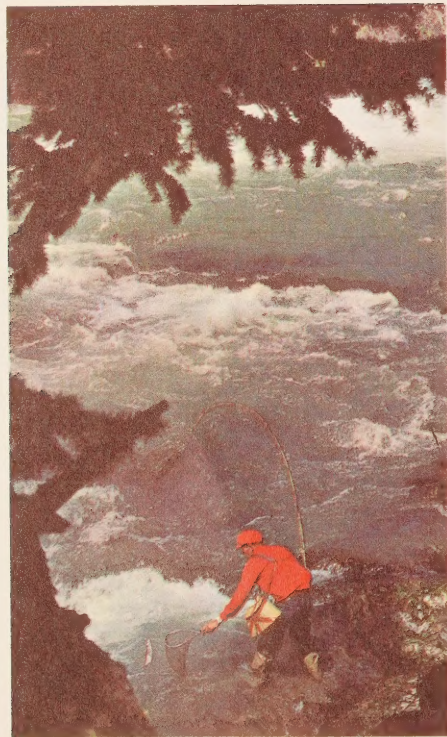
Variety is the source of Canada's popularity with vacationers—variety of climate, of scenery, of people. The Canadian seasons come in different guises to different parts of the country, and arrive at different intervals.

To the greater part of Canada winter brings cold-weather sports and pastimes of all kinds—skiing, skating, curling and ice-hockey, among others. Winter carnivals are popular, the biggest and best-known being that held each year in Quebec City. Sport fans who prefer the spectator's role are entertained by the finest professional hockey teams in the world.

In the late spring and summer, thousands of people move to cottages by lakes and streams, while other thousands swim, fish, sail, motor and golf. Later in the summer, Canada's second main spectator sport, gridiron football, opens its training season, for the next four months or so exerting a hypnotic spell over a large section of the population. Spring and summer are the seasons for open-air festivals and shows. Tourists in Montreal stroll through the Botanical Gardens; visitors to Nova Scotia attend the Annapolis Apple Blossom Festival; thousands of people from the United States and other countries flock to the Calgary Stampede, the greatest Wild West show on earth.

Autumn in Eastern Canada is a blazing tapestry of coloured leaves. From east to west, it is the season for hiking and colour photography, football and baseball, and fall fairs everywhere throughout the countryside.

Canada is a land bountifully endowed with natural playgrounds. The Federal Government maintains some 19 national parks, with camp-sites and other basic camping facilities, and each province maintains a number of similar parks.



Fishing in the Rockies

Chuck-wagon race, Calgary Stampede





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